

CLAIMS

What is claimed is:

1. A therapeutic method for treating or preventing an
5 ocular COX-2 mediated disorder comprising
administering an ocular COX-2 mediated disorder-
effective amount of a source of a COX-2 inhibitor
compound to a mammal in need of such treatment,
wherein the disorder is selected from the group
10 consisting of blepharitis, post-operative
inflammation and pain from corneal transplant
surgery, endophthalmitis, episcleritis, keratitis,
keratoconjunctivitis, keratoconjunctivitis sicca,
post-operative inflammation and pain from lens
15 implantation surgery, Mooren's ulcer and post-
operative inflammation and pain from retinal
detachment surgery.
2. The therapeutic method of Claim 1 wherein the
20 source of the COX-2 inhibitor comprises a COX-2
inhibitor.
3. The therapeutic method of Claim 2 wherein the COX-2
25 inhibitor is selected from the group consisting of
celecoxib, deracoxib, valdecoxib, a benzopyran COX-
2 inhibitor, rofecoxib, etoricoxib, 2-(3,5-
difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-
cyclopenten-1-one and 2-(3,4-difluorophenyl)-4-(3-
hydroxy-3-methylbutoxy)-5-[4-
30 (methylsulfonyl)phenyl]-3(2H)-pyridazinone.
4. The therapeutic method of Claim 3 wherein the COX-2
inhibitor is celecoxib.

5. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is deracoxib.
- 5 6. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is valdecoxib.
7. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is a benzopyran COX-2 inhibitor.
- 10 8. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is rofecoxib.
9. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is etoricoxib.
- 15 10. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is 2-(3,5-difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-cyclopenten-1-one.
- 20 11. The therapeutic method of Claim 3 wherein the COX-2 inhibitor is 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)phenyl]-3(2H)-pyridazinone.
- 25 12. The therapeutic method of Claim 1 wherein the source of the COX-2 inhibitor comprises a prodrug of a COX-2 inhibitor.
- 30 13. The therapeutic method of Claim 12 wherein the prodrug of the COX-2 inhibitor is parecoxib.

14. The therapeutic method of Claim 1 wherein the ocular COX-2 mediated disorder is Mooren's ulcer.
15. The therapeutic method of Claim 14 wherein the
5 source of the COX-2 inhibitor further comprises one or more ophthalmically acceptable excipient ingredients that reduce the rate of removal of the composition from the eye by lacrimation such that the composition has an effective residence time in
10 the eye of about 2 to about 24 hours.
16. A pharmaceutical composition for treating or preventing Mooren's ulcer, in a mammal in need of such treatment, consisting essentially of a source
15 of a COX-2 inhibitor compound and one or more ophthalmically acceptable excipient ingredients that reduce the rate of removal of the composition from the eye by lacrimation such that the composition has an effective residence time in the
20 eye of about 2 to about 24 hours.
17. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising
25 administering an ocular COX-2 mediated disorder-effective amount of celecoxib to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of macular edema, intraoperative miosis and ocular pain.
- 30 18. The therapeutic method of Claim 17 wherein the ocular COX-2 mediated disorder is macular edema.

19. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising administering an ocular COX-2 mediated disorder-effective amount of deracoxib to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of post-operative inflammation and pain from cataract surgery, acute injury to the eye tissue, glaucoma, macular edema, intraoperative miosis, ocular pain, photophobia, post-operative inflammation and pain from refractive surgery, retinitis, retinopathies and uveitis.
20. The therapeutic method of Claim 19 wherein the ocular COX-2 mediated disorder is post-operative inflammation and pain from cataract surgery.
21. The therapeutic method of Claim 20 wherein the ocular COX-2 mediated disorder is macular edema.
22. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising administering an ocular COX-2 mediated disorder-effective amount of valdecoxib to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of macular edema, intraoperative miosis and ocular pain.
23. The therapeutic method of Claim 22 wherein the ocular COX-2 mediated disorder is macular edema.
24. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising

administering an ocular COX-2 mediated disorder-effective amount of a benzopyran COX-2 inhibitor to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of
5 glaucoma, macular edema, intraoperative miosis and ocular pain.

25. The therapeutic method of Claim 24 wherein the ocular COX-2 mediated disorder is macular edema.
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26. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising administering an ocular COX-2 mediated disorder-effective amount of parecoxib to a mammal in need
15 of such treatment, wherein the disorder is selected from the group consisting of conjunctivitis, glaucoma, macular edema, intraoperative miosis and ocular pain.

20 27. The therapeutic method of Claim 26 wherein the ocular COX-2 mediated disorder is macular edema.

28. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising
25 administering an ocular COX-2 mediated disorder-effective amount of rofecoxib to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of post-operative inflammation and pain from cataract surgery,
30 conjunctivitis, acute injury to the eye tissue, glaucoma, macular edema, intraoperative miosis, ocular pain, photophobia, post-operative

inflammation and pain from refractive surgery, retinitis, sarcoidosis and uveitis.

29. The therapeutic method of Claim 28 wherein the
5 ocular COX-2 mediated disorder is post-operative inflammation and pain from cataract surgery.
30. The therapeutic method of Claim 28 wherein the
10 ocular COX-2 mediated disorder is macular edema.
31. A therapeutic method for treating or preventing an
ocular COX-2 mediated disorder comprising
administering an ocular COX-2 mediated disorder-
15 effective amount of etoricoxib to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of post-operative inflammation and pain from cataract surgery,
20 conjunctivitis, acute injury to the eye tissue, macular edema, intraoperative miosis, ocular pain, photophobia, post-operative inflammation and pain from refractive surgery, retinitis, retinopathies, sarcoidosis and uveitis.
32. The therapeutic method of Claim 31 wherein the
25 ocular COX-2 mediated disorder is post-operative inflammation and pain from cataract surgery.
33. The therapeutic method of Claim 31 wherein the
30 ocular COX-2 mediated disorder is macular edema.
34. A therapeutic method for treating or preventing an
ocular COX-2 mediated disorder comprising
administering an ocular COX-2 mediated disorder-

- effective amount of 2-(3,5-difluorophenyl)-3-[4-(methylsulfonyl)phenyl]-2-cyclopenten-1-one to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of post-operative inflammation and pain from cataract surgery, conjunctivitis, acute injury to the eye tissue, macular edema, intraoperative miosis, ocular pain, photophobia, post-operative inflammation and pain from refractive surgery, retinitis, sarcoidosis and uveitis.
35. The therapeutic method of Claim 34 wherein the ocular COX-2 mediated disorder is post-operative inflammation and pain from cataract surgery.
36. The therapeutic method of Claim 34 wherein the ocular COX-2 mediated disorder is macular edema.
37. A therapeutic method for treating or preventing an ocular COX-2 mediated disorder comprising administering an ocular COX-2 mediated disorder-effective amount of 2-(3,4-difluorophenyl)-4-(3-hydroxy-3-methylbutoxy)-5-[4-(methylsulfonyl)phenyl]-3(2H)-pyridazinone to a mammal in need of such treatment, wherein the disorder is selected from the group consisting of post-operative inflammation and pain from cataract surgery, conjunctivitis, acute injury to the eye tissue, glaucoma, macular edema, intraoperative miosis, ocular pain, photophobia, post-operative inflammation and pain from refractive surgery, retinitis, retinopathies, sarcoidosis and uveitis.

38. The therapeutic method of Claim 37 wherein the ocular COX-2 mediated disorder is post-operative inflammation and pain from cataract surgery.
- 5 39. The therapeutic method of Claim 37 wherein the ocular COX-2 mediated disorder is macular edema.

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